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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,229	01/29/2002	Stephen John Hinde	1509-266	2259
22879	7590	09/06/2005	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			MICHALSKI, JUSTIN I	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/058,229	Applicant(s) HINDE, STEPHEN JOHN	
	Examiner Justin Michalski	Art Unit 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5-23, 25-43, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Slezak (US Patent 6,647,119).

Regarding Claims 1 and 21, Slezak discloses a method and apparatus in which services (Fig. 10, 282) are represented by audio labels presented in an audio field through respective synthesized sound sources (294) the method and apparatus providing: storing, for each service to be represented, service access data and data associating the service with at least one said sound source and specifying at least one audio label (Fig. 1, memory and storage 27-29, memory 22); generating an audio field (284) in which said sound sources are synthesized at respective rendering positions to sound their associated service-representing audio labels (294); selecting a service by identifying it through at least one of its sound source and audio label; enabling a user to modify the audio-field layout of the service-representing sound sources and/or what services are represented in the audio field (Slezak discloses using a pointer device such as a mouse, to move an indicator to a new position, Col. 10, lines 1-14).

Regarding Claims 2 and 22, Slezak further discloses rotating and/or displacing the audio field to being the sound source of a target service to lie in a predetermined selection direction (Col. 1, lines 8-14).

Regarding Claims 3 and 23, Slezak further discloses moving an audio-cursor sound source (Fig. 9; Col. 9, lines 26-47) in the audio field to align it with the sound source of a target service (Fig. 10, services 282).

Regarding Claims 5 and 25, Slezak further discloses the selection of a service results in the service-representing sound sources being replaced by an audio interface to the service (email notification; Col. 1, lines 1-3).

Regarding Claims 6 and 26, it is inherent that data of a service is on a machine of service executable files (Fig. 1) in order to deliver the files to the user of the device.

Regarding Claims 7 and 27, Slezak further discloses the access data of a said service is the address of the service resource on a remote machine to be accessed over a communications connection (Slezak discloses the computer environment in Fig. 1 which inherently will include communication connections both in the computer device and through LAN 51 and WAN 52 to transmit information to the user of the device).

Regarding Claims 8 and 28, Slezak further discloses the service is application software (i.e. email notification 282).

Regarding Claim 9 and 29, Slezak further discloses audio labels specified in the audio field in both two and three degrees of freedom (Fig. 10, 290-292).

Regarding Claims 10 and 30, Slezak further discloses the audio labels is a descriptor (simulated sound, Col. 1, lines 1-14).

Regarding Claims 14, 15, 34, and 35 Slezak further discloses the audio label (email-notification; Col. 10, lines 1-5) is an audio feed from the service concerned (email).

Regarding Claims 12 and 32, Slezak further discloses the audio label is a distinctive sound (audible indication; Col. 1, lines 5-6).

Regarding Claims 13 and 33, Slezak further discloses the audio label is user specified by user selection (Col. 1, lines 1-8).

Regarding Claims 14, 15, 34, and 35 Slezak further discloses the audio label (email-notification; Col. 10, lines 1-5) is provided by the corresponding service (email).

Regarding Claims 16 and 36, Slezak further discloses the rendering positions of said sound sources are specified relative to and audio-field reference, a user being enabled to modify the layout of the service-representing sound sources through the modification of the rendering positions of the individual sound sources (Col. 10, lines 8-11).

Regarding Claims 17 and 37, Slezak further discloses varying the rendering positions of said sound source by caring an offset between and audio-field reference relative to which the sounds sources are positioned in the audio field (Fig. 3, user 100), and a presentation reference determined by mounting configuration of audio output devices through which the sound sources are synthesized (speakers 55A-D).

Regarding Claims 18 and 38, Slezak further discloses the field is relative to the world (Fig. 10, field 284 and Fig. 3)

Regarding Claim 19 and 39, Slezak further discloses the offset is varied in response to user input (Col. 10, lines 8-11).

Regarding Claim 20 and 40, Slezak further discloses the user modifying which services are represented in the audio field (Col. 10, lines 1-3).

Regarding Claim 41, Slezak discloses an apparatus for providing an audio user interface in which services are represented by audio labels presented in an audio field through respective synthesized sound sources, the apparatus comprising: a memory for storing (Fig. 1 memory and storage 27-29, memory 22), for each service to be represented (Fig. 10, 282), service access data and data associating the service with at least one said sound source and specifying at least one audio label (294); a rendering subsystem arranged to generate, through audio output devices, an audio field in which said sound sources are synthesized at respective rendering positions to provide sounds their associated service-representing audio labels (Figs. 1-3); a selection arrangement operative to select a represented service by identifying it through at least one of its sound source and audio label (Col., 1, lines 1-12); and user input functionality for enabling a user to modify the audio-field layout of the service-representing sound sources and/or what services are represented in the audio field (Col. 10, lines 1-14).

Regarding Claim 42, Slezak further discloses rotating and/or displacing the audio field to being the sound source of a target service to lie in a predetermined selection direction (Col. 1, lines 8-14).

Regarding Claim 43, Slezak further discloses moving an audio-cursor sound source (Fig. 9; Col. 9, lines 26-47) in the audio field to align it with the sound source of a target service (Fig. 10, services 282).

Regarding Claims 45, Slezak further discloses the selection of a service results in the service-representing sound sources being replaced by and audio interface to the service (email notification; Col. 1, lines 1-3).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 24, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slezak as applied to claims 1, 21, and 41 respectively above.

Slezak discloses a method and apparatus as stated above but does not disclose the user speaking the audio label of a target service, and using a speech recognizer to match, the spoken label to the stored audio labels. However, using speech recognition is notoriously well known in the art for selecting services. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use speech recognition to select a service. One would have been motivated to do so in order to permit blind or visually impaired users to select a service without the use of sight.

**Conclusion**


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Schmant, C., "Audio Hallway: a Virtual Acoustic Environment for Browsing," ACM 0-58113-034-1/98/11, UIST '98, San Francisco, CA . Schmant discloses an audio user-interfacing method and apparatus for storing, generating, and selecting services.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM  
  
August 30, 2005

  
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